

Solar Photovoltaic Case Study

Public Safety Training Academy (PSTA) 10001 South Wilmot Road

TECHNICAL SPECIFICATIONS:

- Installed June 2009.
- 472.5 kW DC; 378 kW AC.
- 2,250 Kyocera 210W (KD210GX-LP) polycrystalline PV panels.
- 1 Satcon 500kW (PVS-500) inverter.
- Greenhouse gas reductions-approximately 771 metric tons CO₂/year.



PROJECT DESCRIPTION:

- Second largest solar project in Tucson, AZ (as of 6/09).
- Single axis TTI tracking system follows sun to maximize output.
- Output of 907,852 kWh per year is approximately 57% of the building load.
- SPG Solar, Inc. guarantees electrical output for 5 years and provides maintenance services for 10 years.
- Wireless reporting system utilized with Fat Spaniel monitoring.
- System production viewable on Fat Spaniel's website at http://tiny.cc/lvWdq.



FINANCIAL DETAILS:

- Project paid for with Clean Renewable Energy Bonds (CREBs).
- 13 year bond repayment period at 0% interest.
- Bonds repaid through TEP rebates and electricity charges to building owner.
- Total cost including design and installation -\$3,199,430.



For additional information go to: http://www.tucsonaz.gov/energy/